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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,688	02/06/2001	Guy Colinart	202720US2	5315

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EXAMINER

LEE, KYUNG S

ART UNIT PAPER NUMBER

2832

DATE MAILED: 03/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/776,688

Applicant(s)

COLINART ET AL.

Examiner

Richard K. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of claims 1-14 in Paper No. 8 is acknowledged. The traversal is on the ground(s) that additional search in class 313 "would not place a serious burden on the Examiner." This is not found persuasive because Class 338 is drawn to resistor devices and Class 313 is drawn to discharge devices such as CRTs. Additional searches involving divergent art(s) pertaining to "microwave tube emitter," "tube grid" and "tube collector" would place serious burden on the examiner by the Applicant. Since their divergent subject matter was discussed (Restriction dated 12/17/2001) the restriction is proper. Claims 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b).

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Collins.

Collins teaches a high voltage resistance device (fig. 1A) comprising:

at least one support 15; and

a flat conductor R with a length L, a width W, a thickness on the support 15.

Resistive material R has resistivity  $\rho$ . And the value of R equaling  $\rho L/A$  is a well-known formula, further support by Collins, col. 4). Further, absent any structural differences the device of Collins "is sufficient to resist arcing."

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts et al.

Roberts et al. teaches a high voltage resistance, comprising:

an organic support (claim 21);

a flat conductor (claims 1-3, resistive foil), the conductor having a length, a width and a thickness and a resistivity;

the value of  $R = \rho L/A$  ( $L$ = length of the foil and the  $A$  = the area of the foil);

an organic glue (page 2, line 43) for bonding the foil to the support;

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Mitsuo.

Roberts et al. teaches the claimed invention except for the flat conductor having a shape of a coil (a spiral, Webster's Tenth Edition).

Mitsuo teaches a resistance device (see fig.) having a flat conductor 2 in a shape of a coil to reduce the size of the device.

One skilled in the art, at the time of the invention, would have found it obvious to provide the device of Roberts et al. in a coil form for the purpose of reducing the size.

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. in view of Horii et al.

Roberts et al. teaches the claimed invention except for the conductor comprises parallel straight segments.

Horii et al. teaches a resistive device having the conductor comprises parallel straight segments for the purpose of adjusting the resistance.

One skilled in the art, at the time of the invention, would have found it obvious to provide the device of Roberts et al. with the conductor comprises parallel straight segments for the purpose of adjusting the resistance.

Regarding claim 6 Roberts et al. teaches nickel alloy conductor (see cover page).

8. Claims 7 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. in view of Horii as applied to claim 6 above, and further in view of Collins.

Roberts and Horii teach the claimed invention except for the conductor being covered by an insulating layer.

Collins teaches a resistance device having an insulating layer (col. 5, line 49) to protect the conductor. One skilled in the art, at the time of the invention, would have found it obvious to provide the device of Roberts and Horii with an insulation layer for the purpose of providing conductor protection.

Regarding claim 8 Roberts teaches a Kapton substrate (page 2, line 48) same as the current invention (page 5, lines 25-30 of the specification).

Regarding claim 9 Collins teaches an organic substrate OG fixed on a ceramic support 35 (see fig.3).

*Allowable Subject Matter*

9. Claims 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 10 recites "resistance is folded on itself." Claims 11-14 depend on claim 10.

*Response to Arguments*

10. Applicant's arguments filed 1/16/2002 have been fully considered but they are not persuasive.

Applicant argues that prior art of record do not disclose "the value of the length L, width l, and the thickness e being defined such that a mass of the flat conductor resists electrical arcing without exceeding a given temperature." The examiner disagrees.  $R$  equaling  $\rho L/A$  is a well-known formula. Absent any structural differences the devices of Collins and Roberts "resist electrical arcing ..."

*Conclusion*

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard K. Lee whose telephone number is (703) 306-9060. The examiner can normally be reached on 6:30 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (703) 308-7619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

RKL  
March 23, 2002

  
ELVIN ENAD  
PRIMARY EXAMINER

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03/20/02